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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,775	07/20/2000	Norman F. Krasner	02344.P037X	3595
23696	7590	10/04/2005	EXAMINER	
Qualcomm, NC 5775 Morehouse Drive San Diego, CA 92121			CHOW, CHARLES CHIANG	
			ART UNIT	PAPER NUMBER
			2685	
DATE MAILED: 10/04/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/619,775

Applicant(s)

KRASNER, NORMAN F.

Examiner

Charles Chow

Art Unit

2685

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 44-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Detailed Action**  
**(For Amendment Received on 7/12/2004)**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 44-45, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (US 5,036,329) in view of Kanai (US 5,239,667).

Regarding **claim 44**, Ando teaches a method of determining of a Doppler search window (one of the Doppler search window having frequency range of +/- 600 Hz, abstract) for acquiring a satellite positioning system signal by a mobile communication device MCD (the satellite recapturing, retracking, from a traveling GPS receiver in a vehicle, col. 4, lines 36-43; the GPS receiver receives satellite frequency fr, col. 4, lines 33-35), the determining the Doppler search window based on the information representing the approximate motion of the MCD (the successively changing of PLL search frequency range within Doppler frequency shift rang predicted from speed in col. col. 6, lines 4-9; the varying of the frequency search range window based on the estimated moving speed of a GPS receiver, for +/- 600 Hz window range, for the maximum speed of 60 m/sec, abstract, col. 5, lines 1-20, the determining search window having Doppler frequency shift due to moving speed of a GPS receiver, col. 1, lines 3-64; the successive change of search frequency, col. 4, lines 64-68).

Ando fails to teach the following features, which taught by Kanai, the method of comprising receiving a cellular communication signal (the detecting of received signal strength in a

communication channel between mobile station 10 and land sites 14, 16, 18, col. 4, lines 60-63, in a cellular mobile system, col. 2, lines 63-68), the determining a change in the received cellular communication signal resulting from motion of the MCD (the monitoring of Rayleigh fading of the received signal strength, due to speed in col. 2, lines 53-62, the calculating of signal level crossing due to speed frequency shift in col. 3, line 2 to col. 4, line 15), the determining information representing the approximate motion of the MCD according to the determined change in the received cellular communication signal (the determination of speed  $V$  based on the Rayleigh fading, signal strength level crossing rate in col. 3, line 2 to col. 4, line 30, col. 3, lines 1-3). Kanai teaches the accurate determination of signal level to be used for a good communication channel between mobile station and landsite (col. 2, lines 40-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Ando with Kanai's accurate speed estimation based on received changing signal due to motional Rayleigh fading, associated with Doppler frequency shift, such that the satellite search window could be accurately determined based on the accurately calculated speed of the mobile station.

Regarding **claim 45**, Kanai teaches the change in the received cellular communication signal resulting from motion of the MCD is represented by the fluctuation of received signal due to Rayleigh fading (monitoring of Rayleigh fading signal strength due to speed, col. 2, lines 53-62, the Rayleigh fading effects the instantaneous level of the received signal in col. 3, lines 2-68).

Regarding **claim 47**, Kanai teaches the change in the received cellular communication signal resulting from motion of the MCD is represented by the transmit power of the MCD, (the

monitoring of Rayleigh fading signal strength due to speed, col. 2, lines 53-62), the measuring of the transmit power signal strength from a mobile station (the detecting of the level crossing rate of the received signal strength power, col. 3, lines 1-13).

2. Claims 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando in view of Kanai, as applied to claim 44 above, and further in view of Gilhousen (US 5,859,612).

Regarding **claim 46**, Ando and Kanai fail to teach the change in the received cellular communication signal resulting from motion of the MCD is represented by the power control commands that control the transmit power of the MCD. However Gilhousen teaches these features, the power control circuitry 438, having the command controlling bits from cell-site to adjust the transmit power of a mobile subscriber station (col. 27, line 66 to col. 28, line 12), the AGC power controlling (col.25, lines 31-40; col. 11, lines 5-14). Gilhousen teaches an improved method for controlling the transmit power to determining of a position of a mobile station, having rotational antenna (abstract, in Fig. 14, 16, in col. 1, line 8-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cisneros, and to include Gilhousen's power controlling command for the determination of the position of a mobile station, such that power level change due to motion could be corrected for a communication link.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 44-47 have been considered but are moot in view of the new ground(s) of rejection.

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Applicant cancels all the other claims and adding new claims 44-47, based on the no teachings of the prior arts. The ground of rejection has been changed to include Ando (US 5,036,329) and Kanai (US 5,239,667).

**Ando** teaches the recapturing, retracking, of the GPS satellite with the successive changing of frequency search window based on the Doppler frequency shift window derived from the estimated moving speed of the GPS receiver in a vehicle (abstract, col. 5, lines 1-20, col. 1, lines 3-64, col. 4, lines 36-43).

**Kanai** teaches the derivation of speed information of a mobile station 10 based on the detecting of the change in the received signal due to speed Rayleigh fading, with calculation of the received level crossing rate to derived vehicle speed via Doppler frequency shift (abstract, Fig. 1-4, col. 3, line 62 to col. 4, line 30; col. 7, line 46 to col. 8, line 22; col. 2, line 48 to col. 3, line 13; col. 5, lines 9-22).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Chow whose telephone number is (703) 306-5615. The examiner can normally be reached on 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

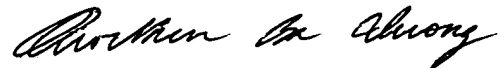
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information

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for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow *C.C.*

April 16, 2005.



**QUOCHIEN B. VUONG**  
**PRIMARY EXAMINER**